

SEEDS Standards and Interfaces Process Study Task

Study Results and Process Options

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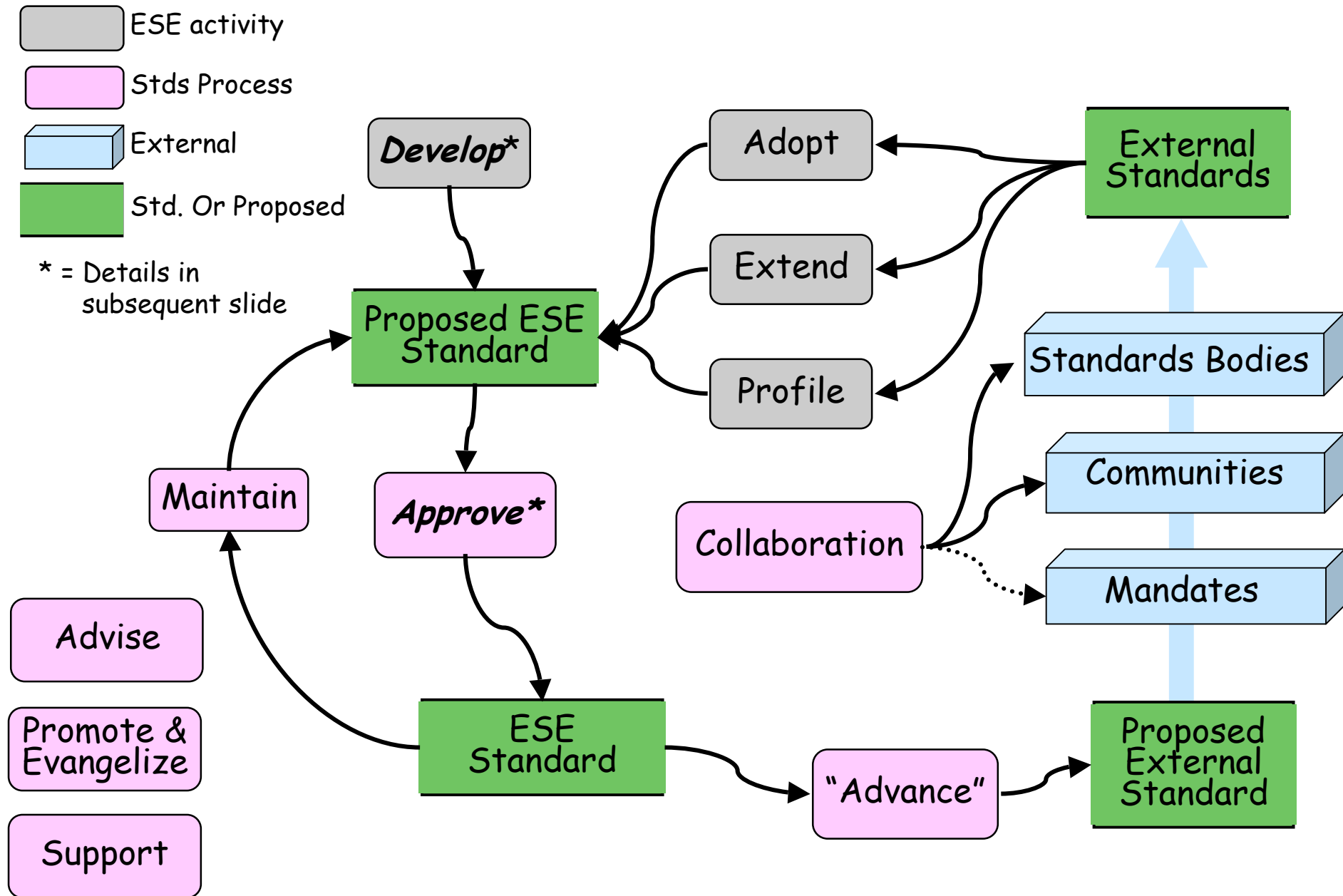
NASA Goddard Space Flight Center

SEEDS Community Workshop,
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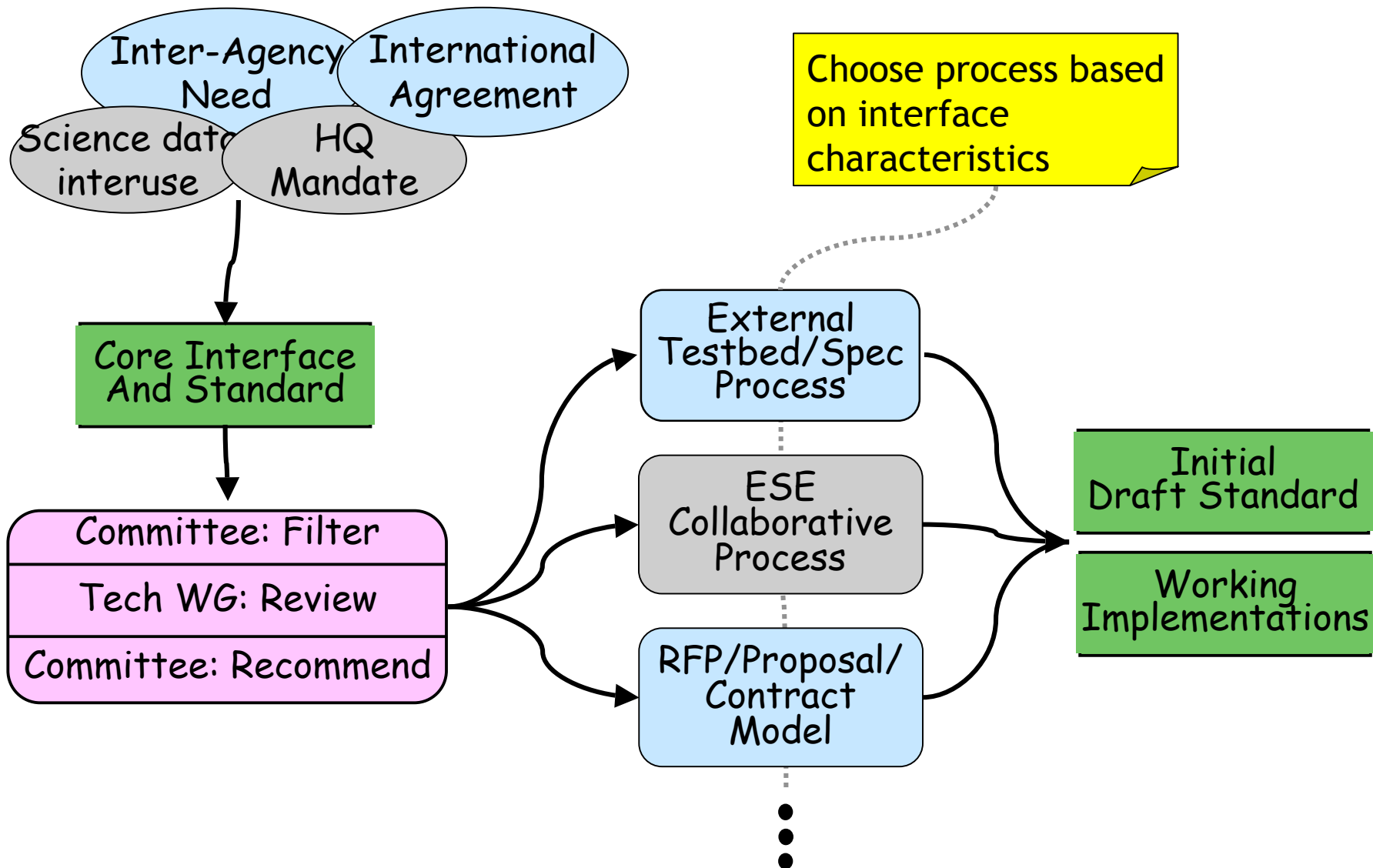
Standards Approval Process - Background

- ❑ **Study Team produced a draft survey of standards**
 - Looked at multiple processes within ESE
 - Looked at multiple processes at other agencies' programs
 - Looked at multiple standards organizations
- ❑ **Developed notional standards process**
 - Based on study team's results & experiences
 - Based on community input at last workshop
 - Based on community interviews
 - Based on input from community consultants.
- ❑ **Favored IETF for overall standards process**
 - Light touch
 - Emphasis on Implementation vs. paper standards
 - IETF standards very widely used
 - IETF process has stood the test of time

Notional Overall Standards Process Diagram



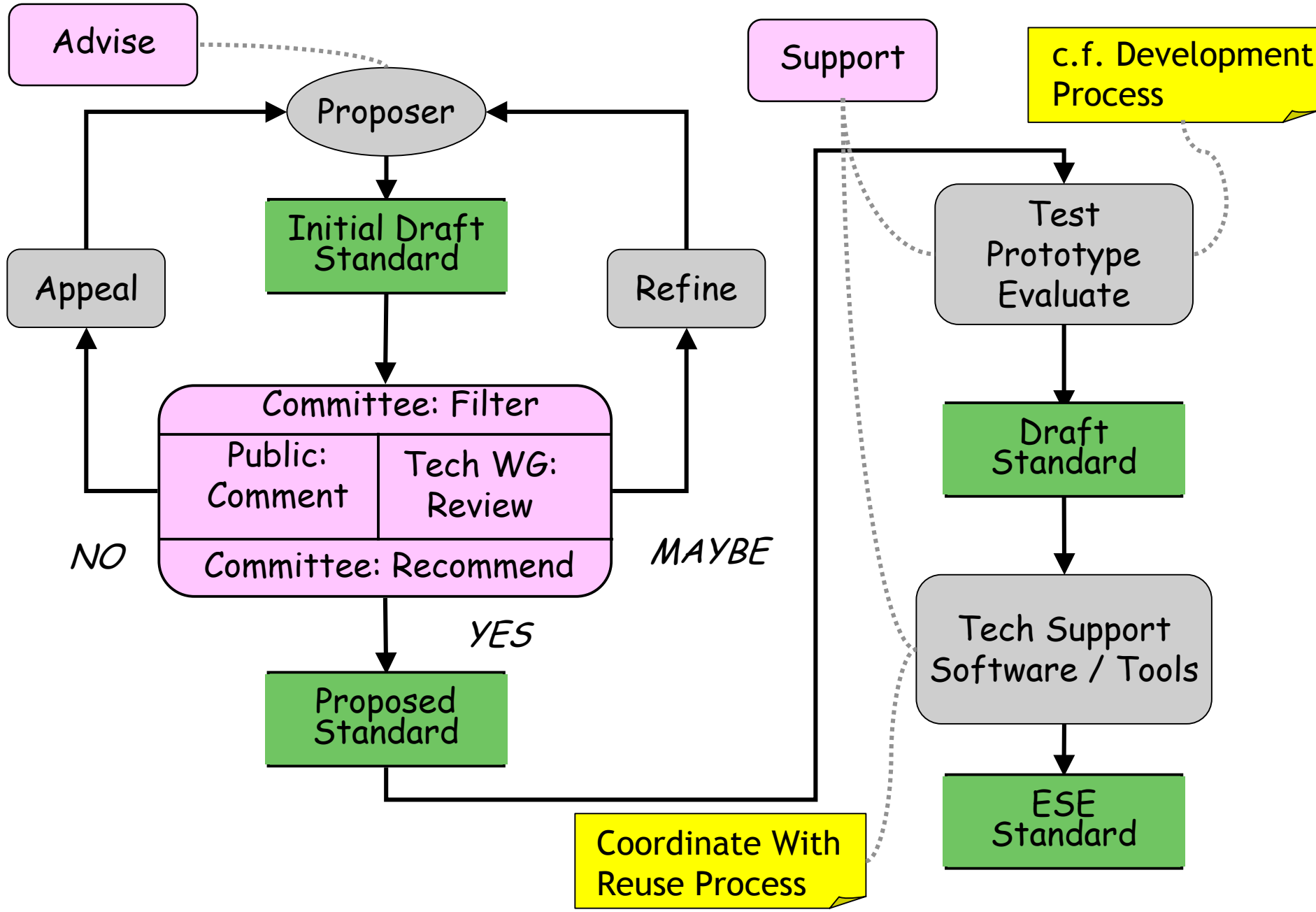
Notional Standards Development Process



Standards Development Process

- ❑ **A technical working group studies the interoperability interface/capability needed and decides which development process to engage**
 - Is the interface suitable to be developed by an external standards organization (potential for widespread use outside the EO community, vendor components possible, etc.)? If yes, then fund external standards organization to develop the standard.
 - Distributed, collaborative development : distributed team composed of members from multiple stakeholder institutions with a system level team leading the development effort funded for development
 - RFP issued and a single team selected for development
- ❑ **Questions**
 - How will the SEEDS community be represented in the technical working group?

Notional Standards Approval Process



Standards Approval Process Questions

Submitting an initial draft standard

- Who can submit?
- How to submit?
- Template for draft standard?

Standards Committee

- Who is on?
- How to resolve conflicts?
- Management of process vs. technical review

Committee Recommendations

- If Initial Draft Standard is similar to an existing standard, may recommend adopting, extending, or profiling this existing standard instead.

Core/Community Standards

- Use this process to adopt new *core standards* (SEEDS mandatory)
 - Mission critical
 - International/interagency agreement
 - NASA mandate
 - Required for SEEDS to function
- Maybe use this process to move *community standards* to wider use (SEEDS recommended)

Definitions

- ❑ **Adopt:** Adopt a standard as-is and use it. E.g. OGC Web Map Server
- ❑ **Advise:** Provide recommendations about and pointers to standards (existing or under development) that could satisfy user's needs
- ❑ **Approve:** Process used to approve or reject proposals for new or enhanced new SEEDS standards
- ❑ **Develop:** Develop a standard for use within SEEDS. E.g. SEEDS may want to develop a standard mechanism for distributing new versions of controlled vocabularies for metadata entries.
- ❑ **Extend:** Adopt a standard but extend its use in some way. E.g. SMTP (Simple Mail Transport Protocol) allows for extensions in the mail headers.
- ❑ **Maintain:** Update standards in response to ongoing requests for clarification, interpretation, enhancements and revisions
- ❑ **Profile:** Adopt a standard but constrain its use in some way. E.g. FGDC metadata content has many optional fields. SEEDS could decide which ones to use/not use
- ❑ **Promote & evangelize:** Advertise standards and support provided by the SEEDS standard group to the SEEDS community
- ❑ **Support:** Technical support and contacts provided by the SEEDS standards group to users implementing & evaluating standards.